

Appendix B CEQA Environmental Checklist

Appendix B CEQA Environmental Checklist

The following CEQA Environmental Checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant impact with mitigation, less than significant impact, and no impact. Please refer to the following for detailed discussions regarding impacts under CEQA:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq.
- Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1

In many cases, background studies performed in connection with the project indicate no impacts. A “no impact” reflects this determination. Any needed discussion is included in the section following the checklist.

The words “significant” and “significance” used throughout the checklist are related to CEQA, not NEPA, impacts (unless otherwise noted). CEQA requires that environmental documents determine significant or potentially significant impacts, NEPA does not. Addressing significant or potentially significant impacts in joint CEQA and NEPA environmental documents can be confusing, especially in those instances where the two laws and implementing regulations have different thresholds of significance. Under NEPA, the degree of impact to a resource is used only to determine which NEPA document is necessary. Once the federal agency has determined the magnitude of a project's impacts and the level of documentation required, it is the magnitude of the impact that is evaluated in the environmental document, not the degree of significance. For the purpose of the impact discussion in this document, determination of significant or potentially significant impacts is made only in the context of CEQA.

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway? Visual changes due to removal of median and shoulder plantings, including oleander; replacement planting is proposed in suitable and feasible roadside locations (See Section 2.1.7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? Removal of vegetation and construction of a median barrier and soundwalls would introduce new sources of glare. Where feasible, vines would be planted on the walls to reduce glare. (See Section 2.1.7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AGRICULTURE RESOURCES - In				
determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentration?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bridges over creeks will not be widened; this will avoid impacts to potential habitat areas; see Section 2.3.1.				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? Bridges over creeks will not be widened; this will avoid impacts to wetland areas; see Section 2.3.2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
COMMUNITY RESOURCES - Would the project:				
a) Cause disruption of orderly planned development?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Be inconsistent with a Coastal Zone Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Affect life-styles, or neighborhood character or stability?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Affect property values or the local tax base?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Result in alterations to waterborne, rail, or air traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Support large commercial or residential development?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Affect wild or scenic rivers or natural landmarks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)? Best Management Practices would minimize construction phase impacts. (See Section 2.4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. The project will conform to current seismic design standards. (See Section 2.2.3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking? The project will conform to current seismic design standards (See Section 2.2.3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction? The project will conform to current seismic design standards (See Section 2.2.3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

HAZARDS AND HAZARDOUS MATERIALS - Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Pre-existing aerially deposited lead would be removed or re-used in accordance with DTSC ADL variance. See Section 2.2.5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school? Pre-existing aerially deposited lead would be removed or re-used in accordance with DTSC ADL variance. See Section 2.2.5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
LAND USE AND PLANNING -				
Would the project:				
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NOISE - Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? There will be impacts requiring consideration of abatement measures (soundwalls). See Section 2.2.7.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Construction noise will be minimized by equipment noise control and administrative measures. (See Section 2.4.10.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
POPULATION AND HOUSING -				
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
PUBLIC SERVICES -				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
RECREATION -				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
TRANSPORTATION/TRAFFIC -				
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incomplete uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? Project encourages carpooling and transit use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
UTILITY AND SERVICE SYSTEMS -				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

MANDATORY FINDINGS OF SIGNIFICANCE -

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

☐ ☐ ☐ ☒

CEQA				
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SECTION 4(f) RESOURCES - Does the project:				
a) Result in the use of any publicly owned land from a park, recreation area, or wildlife and waterfowl refuge, as defined by section 4(f) (23 CFR 771.135)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Affect a significant archaeological or historic site, structure, object, or building, as defined by section 4(f) (23 CFR 771.135)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve “constructive use,” as defined by section 4(f) (23 CFR 771.135)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Appendix C Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086



*Flex your power!
Be energy efficient!*

January 14, 2005

TITLE VI POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Will Kempton".

WILL KEMPTON
Director

Appendix D Glossary of Technical Terms

Glossary of Technical & Abbreviated Terms

AADT	Annual Average Daily Traffic, represents an average 24-hour period of traffic on a facility in both directions averaged over 1 year, or the total of all traffic counted for 1 year, divided by 365 days.
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ac	acres
ACCMA	Alameda County Congestion Management Agency
ACE	Altamont Commuter Express
ACHP	Advisory Council on Historic Preservation
ACTIA	Alameda County Transportation Improvement Authority
ADL	Aerially deposited lead
ADT	Average Daily Traffic, total traffic on a facility in both directions, for one 24-hour day, averaged over a given time period.
ALMIS	America's Labor Market Information System
APE	Area of Potential Effects, the area within which archaeological or historical resources may be affected by a project.
ASR	Archaeological Survey Report
AST	aboveground storage tank
Auxiliary Lane	An auxiliary lane is a traffic lane used to facilitate mainline through-traffic movements. The auxiliary lanes allow traffic entering and exiting the freeway to accelerate or decelerate outside of the through traffic lanes.
BAAB	Bay Area Air Basin
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BATLUC	Bay Area Transportation and Land Use Coalition
Beneficial Use	Use of a natural water resource that enhances the social, economic, and environmental well-being of the user. Twenty-one beneficial uses are defined for the waters of California, ranging from municipal and domestic supply to fisheries and wildlife habitat.
BMP	Best Management Practice, regarding construction phase practices.
BTEX	benzene, toluene, ethyl benzene, and xylenes
CAA	Clean Air Act, as amended in 1990
CAAQS	California Ambient Air Quality Standards
Cal EPA	California Environmental Protection Agency
CalEPPC	California Exotic Pest Plant Council

Caltrans	California Department of Transportation
CAP	Bay Area Clean Air Plan
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESA	California Endangered Species Act
CFGC	California Fish and Game Commission
CFR	<i>Code of Federal Regulations</i>
CHP	California Highway Patrol
CMP	Corrugated metal pipe
CNDDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
CO	carbon monoxide
CORSIM	Corridor Simulation
CRHR	California Register of Historic Resources
CWA	Clean Water Act
DART	Direct Access Responsive Transit
dB	decibels, a measurement unit for noise.
dBA	A-weighted decibels, the measurement of noise that best represents human perception.
DMUs	Diesel Multiple Units
DOT	United States Department of Transportation
DTSC	California State Department of Toxic Substances Control
EA	Environmental Assessment
EB	eastbound
EBRPD	East Bay Regional Park District
EDAB	Economic Development Alliance for Business
EDR	Environmental Data Resources, Inc.
EFZ	Earthquake Fault Zone
EO	Executive Order

EPA	United States Environmental Protection Agency
ESA	Environmentally Sensitive Area
F	fatality
°F	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rating Map
FIS	Flood Insurance Study
ft	foot/feet
FTA	Federal Transit Administration
ha	hectares
HCM	Highway Capacity Manual
HIP	Housing Implementation Program
HM	hotel/motel
HOV	High-Occupancy Vehicle
HPSR	Historic Properties Survey Report
HRER	Historic Resource Evaluation Report
Hz	hertz
I	injury
I-205	Interstate Highway 205
I-5	Interstate Highway 5
I-580	Interstate Highway 580
I-680	Interstate Highway 680
I.L.	Insertion Loss
IS	Initial Study
ISA	Initial Site Assessment, a review of all published data sources on hazardous waste sites and hazardous waste releases in the vicinity of a project.
hm	kilometer(s)
km ²	square kilometers
km/h	kilometers per hour
KP	kilometer post
kV	kilovolt
LAV	Livermore-Amador Valley

LAVTA	Livermore-Amador Valley Transit Authority
LBP	lead-based paint
LE	Longitudinal Encroachment
Lead Agency	Public agency that has primary responsibility for carrying out or approving a project that may have a significant effect on the environment and preparing the environmental document.
$L_{eq}(h)$	A-weighted equivalent sound level averaged over a 1-hour period of time.
L_{max}	Highest sound level during a specified period of time.
LOS	Level of Service
LUST	leaking underground storage tank
m	meter(s)
Maintenance Area	A federal term to describe any geographic region of the United States designated nonattainment pursuant to the CAA and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under Section 175A of the CAA.
MBTA	Federal Migratory Bird Treaty Act
MFR	multi-family residence
mg/kg	milligrams/kilogram
mg/L	milligrams per liter
mg/m^3	milligrams per cubic meter
$\mu g/m^3$	micrograms per cubic meter
mi	mile(s)
MIS	Major Investment Study, prepared during the early planning phase to analyze the range of modal alternatives and cost/benefits of “major metropolitan transportation investments,” which are defined as being highway or transit improvements of substantial cost that are expected to have a significant effect on capacity, traffic flow, level of service or mode share at the transportation corridor or subarea scale. TEA-21 eliminated the requirement for a separate MIS document, but the analysis still must be conducted.
mm	millimeter
M_{max}	moment magnitude
mph	miles per hour
MPO	Metropolitan Planning Organization, a federal designation for the forum for cooperative transportation decision-making for an urbanized area with population of more than 50,000.
MSE	mechanically stabilized earth
MTBE	methyl tertiary butyl ether
MTC	Metropolitan Transportation Commission of the Bay Area

MV	million vehicles
MVM	million vehicle miles
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAHC	Native American Heritage Commission
NB	northbound
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NFRAP	No Further Remedial Action Planned
NHPA	National Historic Preservation Act
NO	nitric oxide
NO ₂	nitrogen dioxide
NOAA Fisheries	National Oceanic and Atmospheric Administration Fisheries Service
NOI	Notice of Intent
Nonattainment Area	Any geographic region of the United States that EPA has designated as a nonattainment area for a transportation related pollutant(s) for which an NAAQS exists.
NO _x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System Permit, required for facilities and activities that discharge waste into surface waters from a confined pipe or channel.
NPL	National Priorities List
NRCS	United States Department of Agriculture, Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
O ₃	Ozone
OH	overhead utility
OHWM	Ordinary high water mark, a distinguishing characteristic of Other Waters of the U.S.
PA	Programmatic Agreement
PAC	Project Advisory Committee
Pb	lead
pc/mi/ln	passenger car per mile per lane
PDS	Project Development Support

PDT	Project Development Team, a multidisciplinary advisory group assembled to review and provide direction on project development.
PG&E	Pacific Gas & Electric
PM	postmile
PM ₁₀	particulate matter less than 10 microns in diameter (one micron is equal to one millionth of a meter)
PM _{2.5}	particulate matter less than 2.5 microns in diameter, considered to be fine particulate matter (one micron is equal to one-millionth of meter)
ppm	parts per million
PRC	California Public Resources Code
PSR	Project Study Report, a Caltrans document establishing consensus among state and local decision makers in the viability and appropriateness of a project. Initiates preliminary engineering and environmental review phase of project development.
PYE	person years of employment
RCRA	Resource Conservation and Recovery Act
REC	recreation facility
Responsible Agency	A “public agency, other than the lead agency that has responsibility for carrying out or approving a project” (PRC 21069). The CEQA Guidelines further explain the statutory definition by stating that a “responsible agency” includes “all public agencies other than the Lead Agency which have discretionary approval power over the project” (14 CCR 15381). State and local public agencies that have discretionary authority to issue permits, for example, fall into this category.
RM2	Regional Measure 2
ROG	reactive organic gases
ROW	right-of-way
RTP	Regional Transportation Plan for the San Francisco Bay Area
RWQCB	California Regional Water Quality Control Board
Scoping	A process for determining the scope of issues to be addressed in an EA and EIS and for identifying significant issues to be analyzed in depth in an EIS.
SHPO	State Historic Preservation Officer

Significance	<p>CEQA defines a "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant" (15382).</p> <p>CEQA requires that the lead agency identify each "significant effect on the environment" resulting from the project and avoid or mitigate it.</p> <p>The CEQA Guidelines include mandatory findings of significance for certain effects, thus requiring the preparation of an EIR.</p>
SIP	State Implementation Plan, the portion (or portions) of an applicable implementation plan approved or promulgated, or the most recent revision thereof, under sections 110, 301(d) and 175A of CAA.
SJRTD	San Joaquin Regional Transit District
SO ₂	sulfur dioxide
SO _x	sulfur oxides
sq mi	square mile(s)
STIP	Statewide Transportation Improvement Program, a staged, multiyear, statewide, intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes and metropolitan plans, TIPs, and processes.
STR	utility on structure
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board, the principal authority for regulating the quantity and quality of waters in the state, established by act of the California legislature in 1967.
tBART	BART-compatible technology
TBD	To be Determined
TCLP	Toxicity Characteristic Leaching Procedure
TCM	Transportation Control Measure, any measure specifically identified and committed to in the applicable implementation plan that is either one of the types listed in § 108 of the CAA, or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the above, vehicle technology-based, fuel-base, and maintenance-based measures that control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of project-level conformity.
TCRP	Transportation Congestion Relief Program
TDS	total dissolved solids

TEA-21	Transportation Equity Act for the 21 st Century
TIP	Transportation Improvement Program, a staged, multi-year, intermodal program of transportation projects that is consistent with the metropolitan transportation plan. It is a federal term.
TMDL	Total Maximum Daily Load
TMP	Transportation Management Plan, used to maintain and manage traffic and transportation in a project vicinity during construction.
TPH	total petroleum hydrocarbons
TR	Transverse Direction
TVTC	Tri-Valley Transportation Council
UG	Underground Utility
UGB	Urban Growth Boundary
UNK	Unknown
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
VMT	vehicle miles of travel
vph	vehicles per hour
WB	westbound
WDR	waste discharge requirements
Wetland	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (USACE and EPA definition).
WH&SP	Worker Health and Safety Plan

Appendix E Agency Correspondence



FACSIMILE TRANSMISSION COVER SHEET

DATE: 31 OCT 2005

TO: KARLA NICHOLAS

Fax: 415/546-1602

CC:

Fax:

FROM: ADAM BAWARD

NUMBER OF PAGES INC. COVER SHEET: (22)

RE: USFWS SPECIES LIST FOR I-S80 - DATED SEPT 8, 2003

REMARKS:

KARLA -

ATTACHED IS THE LIST JEANNETTE REQUESTED
FROM THE SERVICE.

SIGNED:

PARSONS

120 Howard Street, Suite 850 • San Francisco, CA 94105 • phone (415) 495-6050 • fax (415) 546-1602

FAX TRANSMITTAL

To: Adam Ballard**From:** Lois Stevens

Company: ECORP**Pages:** 21 including cover sheet

Fax: 916-782-9122**Date:** September 14, 2005

Phone: 916-782-9100**Project No:** 645176

Subject: I-580 EB HOV Lane Project
USFWS Species List – September 8, 2003



IN REPLY REFER TO:
1-1-03-SP-2934

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

RECEIVED

SEP - 9 2003

PARSONS

September 8, 2003

Ms. Jeannette Owen
Wildlife Biologist
Parsons
2233 Watt Avenue
Suite 330
Sacramento, California 95825

Subject: Species List for I-580 Improvement Project in Livermore, Alameda
County, California

Dear Ms. Owen:

We are sending the enclosed list in response to your September 3, 2003, request for information about endangered and threatened species (Enclosure A). The list covers the following U.S. Geological Survey 7½ minute quad or quads: Altamont, Livermore and Dublin Quads.

Please read *Important Information About Your Species List* (enclosed). It explains how we made the list and describes your responsibilities under the Endangered Species Act. Please contact Dan Buford at (916) 414-6625, if you have any questions about the attached list or your responsibilities under the Endangered Species Act. For the fastest response to species list requests, address them to the attention of Species Lists at this address. You may fax requests to 414-6712 or 414-6713. You may also email them to harry_mossman@fws.gov.

Sincerely,

Roberta Gerson
Acting Deputy Assistant Field Supervisor

Enclosures

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute *quads*. The United States is divided into these quads, which are about the size of San Francisco. If you requested your list by quad name or number, that is what we used. Otherwise, we used the information you sent us to determine which quad or quads to use.

Animals

The animals on your species list are ones that occur within, *or may be affected by projects within*, the quads covered by the list. Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them. Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents. Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones *that have actually been observed* in the quad or quads covered by the list. We have also included either a county species list or a list of species in nearby quads. We recommend that you check your project area for these plants. Plants may exist in an area without ever having been detected there.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. For plant surveys, we recommend using the enclosed *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species*. The results of your surveys should be published in any environmental documents prepared for your project.

State-Listed Species

If a species has been listed as threatened or endangered by the State of California, but not by us nor by the National Marine Fisheries Service, it will appear on your list as a Species of Concern. *However you should contact the California Department of Fish and Game for official information about these species.* Call (916) 322-2493 or write Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814.

Your Responsibilities Under the Endangered Species Act

All plants and animals identified as *listed* on Enclosure A are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the *take* of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal. Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a *formal consultation* with the Service. During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a *biological opinion* by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an *incidental take permit*. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project. Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as *critical habitat*. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Maps and boundary descriptions of the critical habitat may be found in the *Federal Register*. The information is also reprinted in the *Code of Federal Regulations* (50 CFR 17.95).

Candidate Species

We recommend that you address impacts to *candidate* species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Your list may contain a section called *Species of Concern*. This term includes former *category 2 candidate species* and other plants and animals of concern to the Service and other Federal, State and private conservation agencies and organizations. Some of these species may become candidate species in the future.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed, candidate and special concern species in your planning, this should not be a problem. We also continually strive to make our information as accurate as possible. Sometimes we learn that a particular species has a different range than we thought. This should not be a problem if you consider the species on the county or surrounding-quad lists that we have enclosed. If you have a long-term project or if your project is delayed, please feel free to contact us about getting a current list. You can also find out the current status of a species by going to the Service's Internet page: www.fws.gov

**GUIDELINES FOR CONDUCTING AND REPORTING BOTANICAL INVENTORIES
FOR FEDERALLY LISTED, PROPOSED AND CANDIDATE PLANTS
(September 23, 1996)**

These guidelines describe protocols for conducting botanical inventories for federally listed, proposed and candidate plants, and describe minimum standards for reporting results. The Service will use, in part, the information outlined below in determining whether the project under consideration may affect any listed, proposed or candidate plants, and in determining the direct, indirect, and cumulative effects.

Field inventories should be conducted in a manner that will locate listed, proposed, or candidate species (target species) that may be present. The entire project area requires a botanical inventory, except developed agricultural lands. The field investigator(s) should:

1. Conduct inventories at the appropriate times of year when target species are present and identifiable. Inventories will include all potential habitats. Multiple site visits during a field season may be necessary to make observations during the appropriate phenological stage of all target species.
2. If available, use a regional or local reference population to obtain a visual image of the target species and associated habitat(s). If access to reference populations is not available, investigators should study specimens from local herbaria.
3. List every species observed and compile a comprehensive list of vascular plants for the entire project site. Vascular plants need to be identified to a taxonomic level which allows rarity to be determined.
4. Report results of botanical field inventories that include:
 - a. a description of the biological setting, including plant community, topography, soils, potential habitat of target species, and an evaluation of environmental conditions, such as timing or quantity of rainfall, which may influence the performance and expression of target species
 - b. a map of project location showing scale, orientation, project boundaries, parcel size, and map quadrangle name
 - c. survey dates and survey methodology(ies)
 - d. if a reference population is available, provide a written narrative describing the target species reference population(s) used, and date(s) when observations were made
 - e. a comprehensive list of all vascular plants occurring on the project site for each habitat type
 - f. current and historic land uses of the habitat(s) and degree of site alteration
 - g. presence of target species off-site on adjacent parcels, if known

- h. an assessment of the biological significance or ecological quality of the project site in a local and regional context
- 5. If target species is(are) found, report results that additionally include:
 - a. a map showing federally listed, proposed and candidate species distribution as they relate to the proposed project
 - b. if target species is (are) associated with wetlands, a description of the direction and integrity of flow of surface hydrology. If target species is (are) affected by adjacent off-site hydrological influences, describe these factors.
 - c. the target species phenology and microhabitat, an estimate of the number of individuals of each target species per unit area; identify areas of high, medium and low density of target species over the project site, and provide acres of occupied habitat of target species. Investigators could provide color slides, photos or color copies of photos of target species or representative habitats to support information or descriptions contained in reports.
 - d. the degree of impact(s), if any, of the proposed project as it relates to the potential unoccupied habitat of target habitat.
- 6. Document findings of target species by completing California Native Species Field Survey Form(s) and submit form(s) to the Natural Diversity Data Base. Documentation of determinations and/or voucher specimens may be useful in cases of taxonomic ambiguities, habitat or range extensions.
- 7. Report as an addendum to the original survey, any change in abundance and distribution of target plants in subsequent years. Project sites with inventories older than three years from the current date of project proposal submission will likely need additional survey. Investigators need to assess whether an additional survey(s) is (are) needed.
- 8. Adverse conditions may prevent investigator(s) from determining presence or identifying some target species in potential habitat(s) of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any year. An additional botanical inventory(ies) in a subsequent year(s) may be required if adverse conditions occur in a potential habitat(s). Investigator(s) may need to discuss such conditions.
- 9. Guidance from California Department of Fish and Game (CDFG) regarding plant and plant community surveys can be found in Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities, 1984. Please contact the CDFG Regional Office for questions regarding the CDFG guidelines and for assistance in determining any applicable State regulatory requirements.

ENCLOSURE A

Endangered and Threatened Species that May Occur in or be Affected by
Projects in the Area of the Following California Counties
Reference File No. 1-1-03-SP-2934
September 8, 2003

ALAMEDA COUNTY

Listed Species

Mammals

San Joaquin kit fox, *Vulpes macrotis mutica* (E)
riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *
riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *
salt marsh harvest mouse, *Reithrodontomys raviventris* (E)

Birds

California brown pelican, *Pelecanus occidentalis californicus* (E)
California clapper rail, *Rallus longirostris obsoletus* (E)
California least tern, *Sterna antillarum (=albifrons) browni* (E)
bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)
Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS
Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS
Critical habitat, winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS
Sacramento splittail, *Pogonichthys macrolepidotus* (T)
coho salmon - central CA coast, *Oncorhynchus kisutch* (T) NMFS
delta smelt, *Hypomesus transpacificus* (T) *
tidewater goby, *Eucyclogobius newberryi* (E)
winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Invertebrates

bay checkerspot butterfly, *Euphydryas editha bayensis* (T)
callippe silverspot butterfly, *Speyeria callippe callippe* (E)
longhorn fairy shrimp, *Branchinecta longiantenna* (E)
vernal pool fairy shrimp, *Branchinecta lynchi* (T)
vernal pool tadpole shrimp, *Lepidurus packardii* (E)

Reference File No. 1-1-03-SP-2934

Page 2

Plants

California sea blite, *Suaeda californica* (E) *
Contra Costa goldfields, *Lasthenia conjugens* (E)
Presidio clarkia, *Clarkia franciscana* (E)
Santa Cruz tarplant, *Holocarpha macradenia* (T) *
large-flowered fiddleneck, *Amsinckia grandiflora* (E)
pallid manzanita (=Alameda or Oakland Hills manzanita), *Arctostaphylos pallida* (T)
palmate-bracted bird's-beak, *Cordylanthus palmatus* (E)
robust spineflower, *Chorizanthe robusta* var. *robusta* (E) *
showy Indian clover, *Trifolium amoenum* (E) *

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Amphibians

California tiger salamander, *Ambystoma californiense* (PT)

Invertebrates

Critical habitat, vernal pool invertebrates, (PX)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS
Critical habitat, Central Valley fall/late fall-run chinook, *Oncorhynchus tshawytscha* (C) NMFS
green sturgeon, *Acipenser medirostris* (C)

Species of Concern

Mammals

Alameda Island mole, *Scapanus latimanus parvus* (SC)
Berkeley kangaroo rat, *Dipodomys heermanni berkeleyensis* (SC) *
Pacific western big-eared bat, *Corynorhinus* (=Plecotus) *townsendii townsendii* (SC)
San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)
San Joaquin pocket mouse, *Perognathus inornatus* (SC)
Yuma myotis bat, *Myotis yumanensis* (SC)
fringed myotis bat, *Myotis thysanodes* (SC)
greater western mastiff-bat, *Eumops perotis californicus* (SC)
long-eared myotis bat, *Myotis evotis* (SC)
long-legged myotis bat, *Myotis volans* (SC)
salt marsh vagrant shrew, *Sorex vagrans helicoetes* (SC)
small-footed myotis bat, *Myotis ciliolabrum* (SC)

Reference File No. 1-1-03-SP-2934

Page 3

Birds

Alameda (South Bay) song sparrow, *Melospiza melodia pusillula* (SC)
 Aleutian Canada goose, *Branta canadensis leucopareia* (D)
 Allen's hummingbird, *Selasphorus sasin* (SC)
 American bittern, *Botaurus lentiginosus* (SC)
 American peregrine falcon, *Falco peregrinus anatum* (D)
 Bell's sage sparrow, *Amphispiza belli belli* (SC)
 California thrasher, *Toxostoma redivivum* (SC)
 Costa's hummingbird, *Calypte costae* (SC)
 Lawrence's goldfinch, *Carduelis lawrencei* (SC)
 Lewis' woodpecker, *Melanerpes lewis* (SC)
 Vaux's swift, *Chaetura vauxi* (SC)
 bank swallow, *Riparia riparia* (CA)
 black rail, *Lateralus jamaicensis coturniculus* (CA)
 black skimmer, *Rynchops niger* (SC)
 ferruginous hawk, *Buteo regalis* (SC)
 little willow flycatcher, *Empidonax traillii brewsteri* (CA)
 loggerhead shrike, *Lanius ludovicianus* (SC)
 long-billed curlew, *Numenius americanus* (SC)
 marbled godwit, *Limosa fedoa* (SC)
 oak titmouse, *Baeolophus inornatus* (SLC)
 olive-sided flycatcher, *Contopus cooperi* (SC)
 red knot, *Calidris canutus* (SC)
 red-breasted sapsucker, *Sphyrapicus ruber* (SC)
 rufous hummingbird, *Selasphorus rufus* (SC)
 saltmarsh common yellowthroat, *Geothlypis trichas sinuosa* (SC)
 tricolored blackbird, *Agelaius tricolor* (SC)
 western burrowing owl, *Athene cunicularia hypugaea* (SC)
 white-faced ibis, *Plegadis chihi* (SC)
 white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

Reptiles

California horned lizard, *Phrynosoma coronatum frontale* (SC)
 San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
 northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
 silvery legless lizard, *Anniella pulchra pulchra* (SC)
 southwestern pond turtle, *Clemmys marmorata pallida* (SC)

Reference File No. 1-1-03-SP-2934

Page 4

Amphibians

- foothill yellow-legged frog, *Rana boylei* (SC)
- western spadefoot toad, *Spea hammondi* (SC)

Fish

- Pacific lamprey, *Lampetra tridentata* (SC)
- longfin smelt, *Spirinchus thaleichthys* (SC)
- river lamprey, *Lampetra ayraei* (SC)

Invertebrates

- Bridges' Coast Range shoulderband snail, *Helminthoglypta nickliniana bridgesi* (SC)
- California linderiella fairy shrimp, *Linderiella occidentalis* (SC)
- Fairmont (=Lum's) microblind harvestman, *Microcina lumi* (SC)
- Opler's longhorn moth, *Adela oplerella* (SC)
- Ricksecker's water scavenger beetle, *Hydrochara rickseckeri* (SC)
- San Francisco lacewing, *Nothochrysa californica* (SC)
- curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)

Plants

- Ben Lomond buckwheat (= naked buckwheat), *Eriogonum nudum* var. *decurrens* (SC)
- Choris's (=artist's) popcorn-flower, *Plagiobothrys chorisianus* var. *chorisianus* (SLC) *
- Congdon's tarplant, *Hemizonia parryi* ssp. *congdonii* (SC)
- Critical habitat, vernal pool plants, (X)
- Diablo helianthella (=rock-rose), *Helianthella castanea* (SC)
- Hall's bush mallow, *Malacothamnus hallii* (=M. *fasciculatus*) (SLC)
- Hoover's button-celery, *Eryngium aristulatum* var. *hooveri* (SC)
- Hoover's cryptantha, *Cryptantha hooveri* (SLC)
- Kellogg's horkelia, *Horkelia cuneata* ssp. *sericea* (SC) *
- Lemmon's jewelflower, *Caulanthus coulteri* var. *lemmonii* (SLC) *
- Livermore tarplant, *Deinandra bacigalupii* (SC)
- Loma Prieta hoita, *Holita strobilina* (SC) *
- Mason's Illaeopsis, *Illaeopsis masonii* (SC)
- Mt. Hamilton coreopsis, *Coreopsis hamiltonii* (SC)
- Mt. Hamilton thistle, *Cirsium fontinale* var. *campylon* (SC)
- Napa western flax, *Hesperolinon serpentinum* (SC)
- Pacific cordgrass (=California cordgrass), *Spartina foliosa* (SLC)
- San Francisco Bay spineflower, *Chorizanthe cuspidata* var. *cuspidata* (SC) *
- San Francisco popcornflower, *Plagiobothrys diffusus* (CA)
- San Joaquin spearscale (=saltbush), *Atriplex joaquiniana* (SC)
- Sharsmith's onion, *Allium sharsmithae* (SC)

Reference File No. 1-1-03-SP-2934

Page 5

South Bay clarkia (=Santa Clara red ribbons), *Clarkia concinna* ssp. *automixa* (SC)
 Tiburon buckwheat, *Eriogonum caninum* (SLC)
 adobe sanicle, *Sanicula maritima* (SC) *
 alkali milk-vetch, *Astragalus tener* var. *tener* (SC)
 bent-flowered fiddleneck, *Amsinckia lunaris* (SLC)
 big tarplant, *Blepharizonia plumosa* ssp. *plumosa* (SC)
 big-scale (=California) balsamroot, *Balsamorhiza macrolepis* var. *macrolepis* (SLC)
 brittlescale, *Atriplex depressa* (SC)
 caper-fruited tropidocarpum, *Tropidocarpum capparideum* (SC) *
 chaparral harebell (=bellflower), *Campanula exigua* (SLC)
 delta tule-pea, *Lathyrus jepsonii* var. *jepsonii* (SC)
 diamond-petaled California poppy, *Eschscholzia rhombipetala* (SC)
 fragrant fritillary (=prairie bells), *Fritillaria liliacea* (SC)
 hairless allocarya (=popcornflower), *Plagiobothrys glaber* (SC) **
 heartscale, *Atriplex cordulata* (SC)
 hispid bird's-beak, *Cordylanthus mollis* ssp. *hispidus* (SC)
 Interior California (Hospital Canyon) larkspur, *Delphinium californicum* ssp. *interius* (SC)
 large-flowered (=flower) linanthus, *Linanthus grandiflorus* (SC)
 little mousetail, *Myosurus minimus* ssp. *apus* (SC)
 most beautiful (uncommon) jewelflower, *Streptanthus albidus* ssp. *peramoenus* (SC)
 northcoast (=Point Reyes) bird's-beak, *Cordylanthus maritimus* ssp. *palustris* (SC) *
 prostrate navaretia (=prostrate pincushionplant), *Navaretia prostrata* (SC) *
 recurved larkspur, *Delphinium recurvatum* (SC)
 robust monardella (=robust coyote mint), *Monardella villosa* ssp. *globosa* (SLC)
 salt marsh owl's clover (=johnny-nip), *Castilleja ambigua* ssp. *ambigua* (SLC)
 serpentine bedstraw, *Galium andrewsii* ssp. *gatense* (SLC)
 stinkbells, *Fritillaria agrestis* (SLC)
 talus fritillary, *Fritillaria falcata* (SC)
 water sack (=saline) clover, *Trifolium depauperatum* var. *hydrophilum* (SC)
 western leatherwood, *Dirca occidentalis* (SLC)

Reference File No. 1-1-03-SP-2934

Page 6

KEY:

(E)	<i>Endangered</i>	Listed (in the Federal Register) as being in danger of extinction.
(T)	<i>Threatened</i>	Listed as likely to become endangered within the foreseeable future.
(P)	<i>Proposed</i>	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	<i>Proposed Critical Habitat</i>	Proposed as an area essential to the conservation of the species.
(C)	<i>Candidate</i>	Candidate to become a <i>proposed</i> species.
(SC)	<i>Species of Concern</i>	Other species of concern to the Service.
(SLC)	<i>Species of Local Concern</i>	Species of local or regional concern or conservation significance.
(D)	<i>Delisted</i>	Delisted. Status to be monitored for 5 years.
(CA)	<i>State-Listed</i>	Listed as threatened or endangered by the State of California.
NMFS	NMFS species	Under jurisdiction of the National Marine Fisheries Service. Contact them directly.
*	<i>Extirpated</i>	Possibly extirpated from the area.
**	<i>Extinct</i>	Possibly extinct
	<i>Critical Habitat</i>	Area essential to the conservation of a species.

ENCLOSURE A

Endangered and Threatened Species that May Occur in
or be Affected by Projects in the Selected Quads Listed Below

Reference File No. 1-1-03-SP-2934

September 8, 2003

QUAD: 445B ALTAMONT

Listed Species

Mammals

riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *

riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

longhorn fairy shrimp, *Branchinecta longiantenna* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

Plants

palmate-bracted bird's-beak, *Cordylanthus palmatus* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Amphibians

California tiger salamander, *Ambystoma californiense* (PT)

Invertebrates

Critical habitat, vernal pool invertebrates, (PX)

Reference File No. 1-1-03-SP-2934

Page 2

Candidate Species

Fish

green sturgeon, *Acipenser medirostris* (C)

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

Bell's sage sparrow, *Amphispiza belli belli* (SC)

western burrowing owl, *Athene cunicularia hypugaea* (SC)

oak titmouse, *Baeolophus inornatus* (SLC)

ferruginous hawk, *Buteo regalis* (SC)

Costa's hummingbird, *Calypte costae* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Vaux's swift, *Chaetura vauxi* (SC)

white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

prairie falcon, *Falco mexicanus* (SC)

American peregrine falcon, *Falco peregrinus anatum* (D)

greater sandhill crane, *Grus canadensis tabida* (CA)

loggerhead shrike, *Lanius ludovicianus* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

long-billed curlew, *Numenius americanus* (SC)

rufous hummingbird, *Selasphorus rufus* (SC)

Allen's hummingbird, *Selasphorus sasin* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Reference File No. 1-1-03-SP-2934

Page 3

Reptiles

- silvery legless lizard, *Anniella pulchra pulchra* (SC)
- northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
- southwestern pond turtle, *Clemmys marmorata pallida* (SC)
- San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
- California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

- foothill yellow-legged frog, *Rana boylei* (SC)
- western spadefoot toad, *Spea hammondi* (SC)

Fish

- river lamprey, *Lampetra ayresi* (SC)
- Pacific lamprey, *Lampetra tridentata* (SC)
- longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

- curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)
- California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Plants

- Critical habitat, vernal pool plants, (X)
- bent-flowered fiddleneck, *Amsinckia lunaris* (SLC)
- alkali milk-vetch, *Astragalus tener* var. *tener* (SC) *
- heartscale, *Atriplex cordulata* (SC)
- brittlescale, *Atriplex depressa* (SC)
- San Joaquin spearscale (=saltbush), *Atriplex joaquiniana* (SC)
- big-scale (=California) balsamroot, *Balsamorhiza macrolepis* var. *macrolepis* (SLC)
- big tarplant, *Blepharizonia plumosa* ssp. *plumosa* (SC)
- hispid bird's-beak, *Cordylanthus mollis* ssp. *hispidus* (SC)
- Livermore tarplant, *Deinandra bacigalupii* (SC)
- little mouseltail, *Myosurus minimus* ssp. *apus* (SC)
- hairless allocarya (=popcornflower), *Plagiobothrys glaber* (SC) **
- water sack (=saline) clover, *Trifolium depauperatum* var. *hydrophilum* (SC)
- caper-fruited tropidocarpum, *Tropidocarpum capparideum* (SC) **

QUAD: 446A LIVERMORE

Listed Species

Mammals

- riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *
- riparian brush rabbit, *Sylvilagus bechmani riparius* (E) *

Reference File No. 1-1-03-SP-2934

Page 4

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

California least tern, *Sterna antillarum* (=albifrons) browni (E)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

longhorn fairy shrimp, *Branchinecta longiantenna* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

Plants

palmate-bracted bird's-beak, *Cordylanthus palmatus* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Amphibians

California tiger salamander, *Ambystoma californiense* (PT)

Invertebrates

Critical habitat, vernal pool invertebrates, (PX)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus* (=Plecotus) townsendii townsendii (SC)

Berkeley kangaroo rat, *Dipodomys heermanni berkeleyensis* (SC) *

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

Reference File No. 1-1-03-SP-2934

Page 5

long-eared myotis bat, *Myotis evotis* (SC)
fringed myotis bat, *Myotis thysanodes* (SC)
long-legged myotis bat, *Myotis volans* (SC)
Yuma myotis bat, *Myotis yumanensis* (SC)
San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)
Bell's sage sparrow, *Amphispiza belli belli* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
oak titmouse, *Baeolophus inornatus* (SLC)
ferruginous hawk, *Buteo regalis* (SC)
Costa's hummingbird, *Calypte costae* (SC)
Lawrence's goldfinch, *Carduelis lawrencei* (SC)
Vaux's swift, *Chaetura vauxi* (SC)
black swift, *Cypseloides niger* (SC)
white-tailed (=black shouldered) Kite, *Elanus leucurus* (SC)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
prairie falcon, *Falco mexicanus* (SC)
American peregrine falcon, *Falco peregrinus anatum* (D)
loggerhead shrike, *Lanius ludovicianus* (SC)
Lewis' woodpecker, *Melanerpes lewis* (SC)
long-billed curlew, *Numenius americanus* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)
Allen's hummingbird, *Selasphorus sasin* (SC)
California thrasher, *Toxostoma redivivum* (SC)

Reptiles

silvery legless lizard, *Anniella pulchra pulchra* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)
San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylei* (SC)

Fish

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Reference File No. 1-1-03-SP-2934

Page 6

Ricksecker's water scavenger beetle, *Hydrochara rickseckeri* (SC)

curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Plants

Critical habitat, vernal pool plants, (X)

alkali milk-vetch, *Astragalus tener* var. *tener* (SC) *

San Joaquin spearscale (=saltbush), *Atriplex joaquiniana* (SC)

big-scaled (=California) balsamroot, *Balsamorhiza macrolepis* var. *macrolepis* (SLC)

big tarplant, *Blepharizonia plumosa* ssp. *plumosa* (SC)

Livermore tarplant, *Deinandra bicigalupii* (SC) ?

Congdon's tarplant, *Hemizonia parryi* ssp. *congdonii* (SC)

water sack (=saline) clover, *Trifolium depauperatum* var. *hydrophilum* (SC)

QUAD: 446B DUBLIN

Listed Species

Mammals

riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *

salt marsh harvest mouse, *Reithrodontomys raviventris* (E)

riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

California least tern, *Sterna antillarum* (=albifrons) *browni* (E)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

longhorn fairy shrimp, *Branchinecta longiantenna* (E)

Reference File No. 1-1-03-SP-2934

Page 7

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

Proposed Species

Amphibians

California tiger salamander, *Ambystoma californiense* (PT)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

Bell's sage sparrow, *Amphispiza belli belli* (SC)

western burrowing owl, *Athene cunicularia hypugaea* (SC)

ferruginous hawk, *Buteo regalis* (SC)

Costa's hummingbird, *Calypte costae* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Vaux's swift, *Chaetura vauxi* (SC)

black swift, *Cypseloides niger* (SC)

white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

prairie falcon, *Falco mexicanus* (SC)

American peregrine falcon, *Falco peregrinus anatum* (D)

saltmarsh common yellowthroat, *Geothlypis trichas sinuosa* (SC)

loggerhead shrike, *Lanius ludovicianus* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

long-billed curlew, *Numenius americanus* (SC)

bank swallow, *Riparia riparia* (CA)

Reference File No. 1-1-03-SP-2934

Page 8

rufous hummingbird, *Selasphorus rufus* (SC)
Allen's hummingbird, *Selasphorus sasin* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)
California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylei* (SC)

Fish

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Ricksecker's water scavenger beetle, *Hydrochara rickseckeri* (SC)
curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)
California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Plants

Diablo hellanthella (=rock-rose), *Helianthella castanea* (SC)
Congdon's tarplant, *Hemizonia parryi* ssp. *congdonii* (SC)

KEY:

(E)	<i>Endangered</i>	Listed (in the Federal Register) as being in danger of extinction.
(T)	<i>Threatened</i>	Listed as likely to become endangered within the foreseeable future.
(P)	<i>Proposed</i>	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	<i>Proposed Critical Habitat</i>	Proposed as an area essential to the conservation of the species.
(C)	<i>Candidate</i>	Candidate to become a <i>proposed</i> species.
(SC)	<i>Species of Concern</i>	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(SLC)	<i>Species of Local Concern</i>	Species of local or regional concern or conservation significance.
(MB)	<i>Migratory Bird</i>	Migratory bird
NMFS	NMFS species	Under the jurisdiction of the National Marine Fisheries Service. Contact them directly.
(D)	<i>Delisted</i>	Delisted. Status to be monitored for 5 years.
(CA)	<i>State-Listed</i>	Listed as threatened or endangered by the State of California.
(*)	<i>Extirpated</i>	Possibly extirpated from this quad.
(**)	<i>Extinct</i>	Possibly extinct.
	<i>Critical Habitat</i>	Area essential to the conservation of a species.

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov



August 9, 2006

Reply To: FHWA060512E

Elizabeth McKee
Acting Chief, Office of Cultural Studies
California Department of Transportation, District 4
111 Grand Avenue
PO Box 23660
Oakland, CA 94623-0660

Re: Determination of Eligibility for the Proposed I-580 Eastbound HOV Lane Project,
Alameda County, CA

Dear Ms. McKee

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

The California Department of Transportation is requesting my concurrence, pursuant to Stipulation VIII.C.5 of the PA, that the following properties are not eligible for the National Register of Historic Places:

- 812 Vasco Road, Livermore, CA
- 6264 North Front Road, Livermore, CA
- 6342 North Front Road, Livermore, CA

Based on my review of the submitted documentation, I concur.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 654-0631 or e-mail at nlind@ohp.parks.ca.gov.

Sincerely,

Susan K. Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Appendix F Minimization and/or Mitigation Summary

Mitigation Summary

Measures to avoid, minimize, and compensate for potential impacts under the I-580 Eastbound HOV Lane Project are presented in Chapter 2 and summarized in the Summary at the front of this environmental document. An integrated tracking system known as Permits, Approvals, and Mitigation (PAM), developed by Caltrans District 4, will convey these environmental commitments through the different project phases. Four forms are completed throughout the life of the project.

Form 1, Summary of Required Permits and Environmental Commitment, summarizes the required permits and environmental commitments that must be incorporated into the project. Form 1 will be completed on the approval of this environmental document. Forms 2a and 2b are completed during the Plans, Specifications, and Estimates (PS&E) phase by the design office responsible for the project. Form 2a lists all permits along with their expiration dates and construction windows governing construction activities. Form 2b shows whether the commitments have been incorporated into the PS&E or are to be accomplished by Contract Change Order, Maintenance, or a separate contract. Form 2a is signed by the Senior Environmental Planner, the Project Engineer, and the Project Manager certifying that all permit conditions and environmental commitments have been properly addressed as shown on Forms 2a and 2b at the completion of the design phase. Form 3 will be completed by the Office of Construction to record all changes and additions to the environmental commitments or permit conditions made during the construction phase. After completion of the project, Form 4 is completed by the environmental office to provide the maintenance office with information about site sensitivity and actions required to ensure compliance with the permit conditions or environmental commitments.

PAM Form		Project Phase
Form 1	Summary of Required Permits and Environmental Commitment	Plans, Specifications, and Estimates Phase (PS&E)
Form 2a	Permits, Agreements, and Mitigation Commitments	Design
Form 2b	Permits, Agreements, and Mitigation, Commitments	Design
Form 3	Permits, Agreements, and Mitigation Commitments	Construction
Form 4	Permits, Agreements, and Mitigation Commitments	Maintenance and Operation Phase

List of Technical Studies and Referenced Documents

Preliminary technical reports documenting environmental studies conducted for the I-580 Eastbound HOV Lane Project from East of Greenville Road to Hacienda Drive are listed here as are other documents referenced in this EA/IS.

The preliminary technical reports marked with an asterisk (*) are available for review at the following locations:

- California Department of Transportation District 4 office, 111 Grand Avenue, Oakland, California 94623, or website at www.dot.ca.gov/dist4/envdocs.htm
- Alameda County Congestion Management Agency offices at 1333 Broadway, Suite 220, Oakland, CA 94612, or web site at www.accma.ca.gov
- Dublin Public Library, 200 Civic Plaza, Dublin, CA 94568
- Public Library, 400 Old Bernal Avenue, Pleasanton, California 94566
- Livermore Civic Center Library, 1188 South Livermore Avenue, Livermore, California 94550

The following documents and technical reports were referenced in the preparation of this EA/IS:

Alameda County Congestion Management Agency (ACCMA). 2004. *Countywide Transportation Plan*.

Alameda County. 2002. *Alameda County General Plan*.

———. 1994 *East County General Plan*.

Alameda County Flood Control and Water Conservation District. 1997. Zone 7 System Map.

America's Labor Market Information System (ALMIS). 2006. Employer Database.

Association of Bay Area Governments (ABAG). 2005a. *ABAG Projections 2005: Forecasts for the San Francisco Bay Area to the Year 2030*.

San Joaquin Council of Governments Board Staff Report, 2005-2030 Population and Employment Projections, April. 2004.

California Department of Fish and Game (CDFG). 1995. Staff Report on Burrowing Owl Mitigation.

California Department of Transportation (Caltrans). 2006. Traffic Accident Surveillance and Analysis (TASA) System data from Transportation Systems Network (TSN) report. September.

———. 2006a. Standard Environmental Reference Guidelines. Accessed via web site at: <http://www.dot.ca.gov/ser/vol1/sec3/physical/ch13energy/chap13.htm>

- . 2002. *Traffic Volumes on the California Highway System*. Accessed via web site at <http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/2002all.html> and <http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm>, 2004aadt.xls and 2004truck.xls.
- . 2002a. *Standard Specifications for Construction of Local Streets and Roads*.
- . 2001. *Project Study Report/Project Development Support from Tassajara Road/Santa Rita Road to Vasco Road*.
- . 2000. *Initial Site Assessment for the I-580 HOV Lane Project Study Report*. September.
- . 1998. *Traffic Noise Analysis Protocol for New Highway Construction and Highway Reconstruction Projects*.
- *CirclePoint. 2005. *Summary Report: Joint Informational Public Open House/Meeting, July 28, 2005 for the I-580 Eastbound High-Occupancy Vehicle (HOV) Lane Project, Route 84 Expressway Widening Project, I-580/Isabel Avenue Interchange Project*. September.
- City of Dublin General Plan. Adopted 1985 (updated to 2002).
- City of Livermore General Plan. Adopted 2004.
- City of Pleasanton General Plan. Adopted 1999.
- City of Stockton. 2004. *General Plan Background Report*. February.
- East County Area Plan. 1994.
- *ECORP Consulting, Inc. 2006. *California Red-Legged Frog (Rana aurora draytonii) Habitat Assessment for I-580 Eastbound HOV Lane Project from East of Greenville Road to Hacienda Drive*. August.
- *———. 2006a. *Natural Environment Study for the I-580 HOV Lane Project: East of Greenville Road to Hacienda Drive*. August.
- *———. 2006b. *Preliminary Wetland Delineation Report for I-580 Eastbound HOV Lane Project, Alameda County, California*. March.
- Environmental Laboratory. 1987. *U.S. Army Corps of Engineers Wetlands Delineation Manual*.
- Erickson, G. A., et al. 2003. *Bats and Bridges Technical Bulletin (Hitchhiker Guide to Bat Roosts)*. California Department of Transportation.
- Far Western Anthropological Research Group. 2006. *Archaeological Survey Report*.
- Federal Highway Administration (FHWA). *Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR Part 772)* 2006.
- . 2004. *Traffic Noise Model – TNM 2.5*.
- *JRP Historical Consulting Services. 2006. *Historical Resources Evaluation Report for the I-580 Eastbound HOV Lane Project: East of Greenville Road to Hacienda Drive*.

- Kimley-Horn and Associates, Inc. 2005. I-580 Ramp Metering “Before” and “After” Evaluation. February.
- Metropolitan Transportation Commission (MTC). 2005. Transportation 2030 Plan for the San Francisco Bay Area.
- . 2003. *2002 High Occupancy Vehicle (HOV) Lane Master Plan Update*.
- . 2002. *2001 RTP for the San Francisco Bay Area*, Adopted December 2001, Amended November 2002: Attachment A, Contra Costa County Projects, Track 1.
- . 2000. *Blueprint for the 21st Century, Phased Implementation Plan*.
- Mualchin, Lillian. 1996. *Caltrans’ California Seismic Hazard Map*.
- *Parikh Consultants, Inc. 2006. *Geotechnical Report for the I-580 Eastbound High Occupancy Vehicle Lane: East of Greenville Road to Hacienda Drive*.
- *———. 2006a. *Initial Site Assessment: I-580 Eastbound High Occupancy Vehicle Lane: East of Greenville Road to Hacienda Drive.*
- *Parsons. 2006. *Community Impact Assessment for the I-580 Eastbound HOV Lane Project: East of Greenville Road to Hacienda Drive*.
- *———. 2006a. *Growth Inducement Analysis Report for I-580 Eastbound High-Occupancy Vehicle Lane Project*.
- . 2006b. *Historic Properties Survey Report for the I-580 HOV Lane Project: East of Greenville Road to Hacienda Drive*.
- *———. 2006c. *Noise Study for the Interstate 580 HOV Lane Project: East of Greenville Road to Hacienda Drive*.
- *———. 2006d. *Technical Memorandum on Energy Impacts for the I-580 Eastbound HOV Lane Project from East of Greenville Road to Hacienda Drive*.
- *———. 2006e. *Traffic Operations Technical Memorandum, I-580 Eastbound HOV Lane Project, East of Greenville Road to Hacienda Drive*.
- *———. 2006f. *Visual Impact Assessment for the Interstate 580 HOV Lane Project: East of Greenville Road to Hacienda Drive*
- San Francisco Bay Regional Water Control Board. 2004. *Final Project Report for Diazinon and Pesticide-Related Toxicity in Bay Area Urban Creeks, Water Quality Attainment Strategy and Total Maximum Daily Load*. March.
- Schwarzenegger, Arnold et al. 2004. *Draft California Transportation Plan 2025*. March.
- State of California Legislature. 2000. *Traffic Congestion Relief Program*.
- *Terry A. Hayes Associates. 2006. *Interstate 580 Eastbound Hov Lane Project From East Of Greenville Road To Hacienda Drive, Air Quality Impact Technical Report*. March.

- Transportation Research Board. 2000. *Highway Capacity Manual (HCM)* – Chapter 23, “Basic Freeway Sections.” Washington, D.C.
- Tri-Valley Council. 1995. *Transportation Plan/Action Plan for Routes of Regional Significance*.
- United States Census Bureau. 2000. Census data.
- United States *Code of Federal Regulations*.
- United States Fish and Wildlife Service (USFWS). 2005. *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog*.
- _____. 2006. *Designation of Critical Habitat for the California Red-Legged Frog (Rana aurora draytonii); Final Rule*. Federal Register 71(71):19244-19346 Dated April 13, 2006.
- *Wreco. 2006. *I-580 Eastbound HOV Lane Widening Project in the Cities of Pleasanton, Dublin, and Livermore, Alameda County, California: Drainage Impact Summary Report*.
- *_____. 2006a. *I-580 Eastbound HOV Lane Project: East of Greenville Road to Hacienda Drive: Location Hydraulic Study Report*.
- *_____. 2006b. *I-580 Eastbound HOV Lane Project: East of Greenville Road to Hacienda Drive:: Storm Water Data Report (PA/ED Phase)*.
- *_____. 2006c. *I-580 Eastbound HOV Lane Project: East of Greenville Road to Hacienda Drive:: Water Quality Summary Report*.